

WHAT IS CLAIMED IS:

1. A driver, comprising:
  - a rotor adapted to be rotated with an axis portion as a center;
  - 5 a first bearing for supporting one end of the axis portion of the rotor; and
  - a second bearing for supporting the other end of the axis portion of the rotor,
  - wherein a portion of the first bearing into
  - 10 which the axis portion is fitted has a tapered shape, and the axis portion is brought into contact with the portion having the tapered shape of the first bearing.
2. A driver according to claim 1, wherein the portion of the first bearing into which the axis portion is fitted has a conical shape.
3. A driver according to claim 1, wherein a portion of the axis portion which is fitted into the first bearing has one of a semi-spherical shape and a spherical shape.
4. A driver according to claim 1, wherein the portion of the first bearing into which the axis portion is fitted further has a shape for regulating a radial movement of the axis portion.

5. A driver according to claim 1, further comprising biasing means for axially biasing the axis portion of the rotor to bring the axis portion into contact with the first bearing.

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6. A driver according to claim 5, further comprising a coil and a yoke, wherein a magnet is fixed to the rotor, the axis portion of the rotor is axially biased by a magnetic force acting between the 10 yoke and the magnet, and a current is caused to flow through the coil to rotate the rotor.

7. A driver, comprising:  
a rotor adapted to be rotated with an axis  
15 portion as a center;  
a first bearing for supporting one end of the axis portion of the rotor; and  
a second bearing for supporting the other end of the axis portion of the rotor,  
20 wherein a portion of the axis portion which is fitted into the first bearing has a tapered shape, and the first bearing is brought into contact with the portion having the tapered shape of the axis portion.

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8. A device for adjusting a quantity of light, comprising:

a rotor adapted to be rotated with an axis portion as a center;

a first bearing for supporting one end of the axis portion of the rotor;

5 a second bearing for supporting the other end of the axis portion of the rotor; and

a member for adjusting a quantity of light which moves in accordance with a rotation of the rotor,

10 wherein a portion of the first bearing into which the axis portion is fitted has a tapered shape, and the axis portion is brought into contact with the portion having the tapered shape of the first bearing.

15 9. A device for adjusting a quantity of light according to claim 8, wherein the portion of the first bearing into which the axis portion is fitted has a conical shape.

20 10. A device for adjusting a quantity of light according to claim 8, wherein a portion of the axis portion which is fitted into the first bearing has one of a semi-spherical shape and a spherical shape.

25 11. A device for adjusting a quantity of light according to claim 8, wherein the portion of the first bearing into which the axis portion is fitted

further has a shape for regulating a radial movement of the axis portion.

12. A device for adjusting a quantity of light  
5 according to claim 8, further comprising biasing means for axially biasing the axis portion of the rotor to bring the axis portion into contact with the first bearing.

10 13. A device for adjusting a quantity of light according to claim 12, further comprising a coil and a yoke, wherein a magnet is fixed to the rotor, the axis portion of the rotor is axially biased by a magnetic force acting between the yoke and the magnet, 15 and a current is caused to flow through the coil to rotate the rotor.

14. A device for adjusting a quantity of light according to claim 8, wherein the rotor is provided 20 with a driving lever, and the driving lever is fitted into the member for adjusting a quantity of light.

15. A device for adjusting a quantity of light according to claim 13, wherein the first bearing is 25 provided in a first case, the second bearing is provided in a second case, the first case and the second case constitute a bobbin, and the coil is

wound around the bobbin.

16. A device for adjusting a quantity of light according to claim 9, wherein the conical shape is  
5 formed so as for an angle of its vertex to fall within the range of 90 to 110 degrees.

17. A device for adjusting a quantity of light according to claim 8, wherein a position of the rotor  
10 is detected by a Hall element.

18. A device for adjusting a quantity of light, comprising:

a rotor adapted to be rotated with an axis  
15 portion as a center;  
a first bearing for supporting one end of the axis portion of the rotor;  
a second bearing for supporting the other end of the axis portion of the rotor; and  
20 a member for adjusting a quantity of light which moves in accordance with a rotation of the rotor,

wherein a portion of the axis portion which is fitted into the first bearing has a tapered shape,  
25 and the first bearing is brought into contact with the portion having the tapered shape of the axis portion.